REMARKS/ARGUMENTS

These remarks are submitted in response to the Office Action of February 16, 2007 (Office Action). As this response is timely filed within the 3-month shortened statutory period, no fee is believed due.

In paragraph 4, Page 2 of the Office Action, Claims 1-5, 7-9, 11, 13-20, 22-30 and 32 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent Application Publication No. 2002/0047550 to Tanada (hereinafter Tanada). In paragraph 7, Page 11 of the Office Action, Claims 10, 21 and 31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Tanada in view of U.S. Patent No. 6,121,949 to Ramamurthy (hereinafter Ramamurthy). In paragraph 8, Page 12 of the Office Action, Claim 6 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Tanada in view of U.S. Patent No. 6,456,279 to Kubo (hereinafter Kubo). In paragraph 9, Page 13 of the Office Action, Claim 12 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Tanada in view of U.S. Patent No. 6,836,260 to Cok (hereinafter Cok).

Applicants have amended independent Claims 1, 14, 16, 24 and 26 to further emphasize certain aspects of the invention. Applicants also have cancelled dependent Claims 6, and have amended dependent Claims 3, 4, 5, 10, 17, 18, 19, 21, 27, 28, 29 and 31 to maintain consistency among all the remaining claims. As discussed herein, the claim amendments are fully supported throughout the Specification. No new matter has been introduced through the claim amendments presented.

Aspects Of Applicant's Invention

It may be helpful to reiterate certain aspects of Applicants' invention prior to addressing the references cited in the Office Action. The invention, for example, provides a self-calibrating imaging display system comprising a display having a screen, and at least one photosensor formed on a transparent sheet removeably affixed to the

screen. The transparent sheet can be temporarily disposed on the screen for performing the calibration, and thereafter removed. In one arrangement, the calibration module can update the luminance correction factor at different regions on the screen responsive to a user input on the transparent sheet at the different regions.

The Claims Define Over the Prior Art

Tanada is directed to a self light emitting device capable of long term uniform screen display with no brightness irregularities. The device includes pixels having electroluminesence (EL) elements and photoelectric elements providing a brightness correction function. In particular, the photoelectric element compares a brightness of the EL elements to a standard brightness to determine portions of insufficient brightness. The self light emitting device corrects the brightness in accordance with measured brightness irregularities in the screen display.

The self light emitting devices is a semiconductor thin film formed on an insulator such as a glass substrate, in particular, to active matrix self light emitting devices using thin film transistors (TFT) (paragraph [0004]). The TFT is created by a semiconductor process that forms layers onto a glass substrate (paragraphs [0132]-[0181]), which are integrated within the display as shown in FIGs 5A-5C. In particular, FIG 5 shows a driver circuit portion (source signal line driver circuit, gate signal line driver circuit and pixel selection signal line driver circuit) formed in the periphery thereof in an active EL display device (paragraph [0132]).

Each EL element, which generates the light for the display, is paired with a photoelectric element (see FIGs 5-7) in an integrated arrangement (e.g. side by side). As shown in FIGs 5-7, and described in paragraphs [0132]-[0181], the light detection circuitry (i.e. photoelectric element) is intimately coupled with the light emitting circuitry (e.g. EL element). Accordingly, the self light emitting device is an integrated device that

cannot be easily separated without due effort.

In contrast, Applicants' invention includes a transparent screen that can be removeably affixed to a screen of another display (see Specification, Page 7, paragraph [0015].) The self-calibrating imaging display includes photoelectric elements that are separate from, and are not integrated with, the lighting elements of the display. That is, the light detection and light emitting elements are not paired side by side in an integrated device as that taught by Tanada (See FIGs 5-7). Tanada does not teach that the light detection circuitry can be performed apart from the light emitting circuitry.

In Applicants' invention, the photosensors can be formed on a transparent sheet which can be disposed on the screen. The transparent sheet can be permanently or removeably affixed to the screen (See Specification, Page 9, paragraph [0024]). In the event that the transparent sheet is permanently attached to the screen, the transparent sheet can be attatched to the screen with an optically transparent adhesive. Tanada does not contemplate adhering a transparent sheet to a display since the light emitting and detecting elements of Tanda are integrated in a single device. With Applicants' invention, by contrast, the transparent sheet can be removeably affixed to the screen, since the light emitting (e.g. elements in the display) and detecting elements (e.g. photosensors) are separated.

As already noted, Claim 6 was rejected under 103(a) as being unpatentable over Tanada in view of Kubo. The amendments to the independent claims incorporate the subject matter of claim 6. Applicants respectfully submit, therefore, that the rejections of claim 6 are now addressed.

Kubo is directed to a liquid crystal display (LCD) device that has a position information input device over an image-displaying surface of a liquid crystal panel. The LCD device can include an illumination device made of a light guide plate and a light source and a touch panel that are provided or integrated on a display-surface side of a

reflection type of liquid crystal panel to uniformly illuminate its entire effective display area so that a high-quality image display can be obtained and the brightness of the screen can be improved.

As noted on Page 12 of the Office Action, Kubos teaches a touch panel, where sensors are disposed on a transparent sheet disposed on the screen. However, in Kubos, the sensors are touch-based sensors integrated within a touch panel. Kuobs does not contemplate light detecting sensors in a touch panel, nor would one skilled in the art be motivated to provide such. Kubos teaches that a touch panel can be overlaid on an LCD panel, and that the touch panel should be transparent to allow light to pass from the LCD panel. The arrangement can allow a user to see the LCD display and interact with the LCD panel through the overlaid touch panel.

FIG. 5 of Kubo shows a cross section of the LCD device which includes a lamp 3, LCD panel 1, and touchpanel 4. The components are shown separate for purposes of illustration, though are integrated in practice (col 9, lines 10-30). Light from the lamp 3 is reflected and directed in the direction of the LCD panel 1, and the light reflected from the LCD panel 1 is transmitted through the touch panel 4 and exits on the display-surface side of the liquid crystal display device. Only the LCD panel 1 includes light emitting elements. The touch panel 4 does not include light emitting elements, or light detecting elements. The touch panel includes touch based sensors which are activated on physical action (e.g., by physical touch), and not by light waves.

Notably, Kubo does not teach that the touch panel, which is disposed on the LCD panel, can include photoelectric light detecting elements. Moreover, Kubos does not contemplate using the touch panel to evaluate a brightness of the LCD panel. Kubos merely describes a transparent touchpanel as a desirous feature for allowing light to pass. Kubos does not contemplate using a touchpanel to actively adjust a brightness of the LCD panel. Furthermore, the touch panel and LCD panel are an integrated component,

and one skilled in the art would not contemplate separating the two to achieve aspects of Applicant's invention. One skilled in the art would not be motivated to provide the photosensors of Tanada's device on a transparent substrate disposed on the screen as taught by Kubo to improve the brightness of a display.

On page 11 of the Office Action, it was stated that Tanada fails to teach updating said luminance correction factor responsive to a user input. In the same field of preserving image quality, it was stated that Ramamurthy teaches allowing a user to select screen parameters to improve the quality of the display (Col. 3, lines 45-46). However, Ramamurthy is silent as to how the screen parameters are updated. In contrast, Applicant's invention teaches that a calibration module updates the luminance correction factor at different regions in the screen responsive to a user input on the transparent sheet at said different regions In particular, "*... the display can be provided with luminance controls that can be calibrated via the display adapter*" for example in response to user input. (Specification Page 7, paragraph [0016]; see also Page 11, paragraph [0030].) In this respect, a user upon determining an irregularity of screen brightness can touch the display to calibrate a region of the display corresponding to the position of the user input on the display. It should also be noted that Kubo does not teach this aspect of the invention; that is, the calibration of brightness based upon a user input corresponding to a region of the screen.

On page 11 of the Office Action, it was stated that Tanada fails to teach utilizing the display in a medical imaging device, though in the same field, Cok teaches the use of such displays is critical in medical fields. Cok is directed to a sensor device that senses a light output of a display, and presents an indication of the remaining useful life of the display. Cok merely states that some imaging applications are critical; that is, they cannot be allowed to fail. Applicants' invention is directed to a transparent sheet that can be removeably affixed to a screen. The transparent screen is applied to the display to

calibrate the display, and can thereafter be removed without affecting the original display resolution. In this respect, the original image presentation quality of the display is preserved since the transparent screen is removed after calibration.

Cok is concerned with determining the useful life of the display, and not with the quality or the resolution of the display, which may be affected when a transparent sheet is overlaid on the screen. In Applicants' invention, the transparent sheet is removeably affixed to the display for purposes of display quality, not reliability. Therefore it would not be obvious to one skilled in the art to use the self-calibrating display of Tanada in a medical image display as shown by Cok in order to provide a reliable display of critical data to be displayed. Again, Tanada is directed to an integrated device that couples light emitting circuitry with light detection circuitry, which may affect the quality display. In contrast, Applicants' invention separates the light emitting circuitry and the light detection circuitry to preserve the display quality of the light emitting circuitry.

Applicants respectfully assert that whereas Tanada fails to expressly or inherently teach each of the features recited in amended independent Claims 1, 14, 16, 24 and 26, the claims are not anticipated by the prior art. Since Ramamurthy, Kubos, and Cok, alone or in combination, fail to teach or suggest the featuress of the present invention as claimed, withdrawal of the 35 U.S.C 103(a) rejections regarding Claims 1, 14, 16, 24 and 26, is respectfully requested. Applicants further respectfully assert that whereas each of the remaining claims depend from one of amended independent Claims while reciting additional features, these dependent claims likewise define over the prior art. Applicants, therefore, respectfully request withdrawal of the rejection of Claims 1-32.

CONCLUSION

Applicants believe that this application is now in full condition for allowance, which action is respectfully requested. Applicants request that the Examiner call the

undersigned if clarification is needed on any matter within this Amendment, or if the Examiner believes a telephone interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,

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Gregory A. Nelson, Registration No. 30,577
Richard A. Hinson, Registration No. 47,652
Marc A. Boillot, Registration No. 56,164
AKERMAN SENTERFITT
Customer No. 40987
Post Office Box 3188
West Palm Beach, FL 33402-3188
Telephone: (561) 653-5000